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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,050	11/13/2003	Ta-Yuan Lee	LEE0025-US	7138

7590 09/25/2007  
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EXAMINER
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NGUYEN, HOAN C

ART UNIT	PAPER NUMBER
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2871

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09/25/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/706,050

Applicant(s)

LEE ET AL.

Examiner

HOAN C. NGUYEN

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-23 is/are pending in the application.
- 4a) Of the above claim(s) 4, 5, 14, 15 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-9, 11-13, 16-19 and 21-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/22/07 has been entered.

Claims 4-5, 14-15 and 20 are withdrawn. Claim 10 is canceled.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-3, 6-9 and 21-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Sugawara et al. (US 20030174262A1).

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Sugawara et al. teach (Figs. 1, 2 and 5) a display apparatus selectively operated in a first mode and a second mode comprising:

Claims 1 and 21:

- a display panel having view side and back side, said viewer side having a first area and a second area; in response to an image signal, said first and second capable of displaying variable data;
- a first light source for illuminating said first area;
- a second light source for illuminating said second area; when said display apparatus is operated in said second mode for conserving power of said display apparatus

wherein

- said first area and said second area are illuminated with inherently substantially same brightness by said first light source and said second light source simultaneously to make said first area and said second area having substantially same visually brightness on the viewer side when said display apparatus is operated in said first mode;
- the power consumption might further be reduced since only a required display region is irradiated (turn on while the other light source is turning off as Fig. 5 shown). This above feature inherently the following feature: said second light source is driven to a lower brightness level (turning off) to make said second area visually darker than said first area (turn on to irradiate),

Claim 2:

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- said first light source and said second light source are both turned on when said display apparatus is operated in said first mode.

Claim 3:

- wherein said first light source is turned on (to irradiate) and said second light source is turned off (to conserve power) when said display apparatus is operated in said second mode.

Claims 6-7:

- a first light guide plate for reflecting and scattering light provided by said first light source so that light uniformly illuminates said first area, wherein said first light guide plate further comprises a light guide structure for reflecting light provided by said first light source to said first area.

Claims 8-9:

- a second light guide plate for reflecting and scattering light provided by said second light source so that light uniformly illuminates said second area, wherein said second light guide plate further comprises a groove surface for reflecting light provided by said second light source to said second area.

Claim 22:

- said mobile device comprises a mobile phone, a personal digital assistance, or a digital camera.

Claim 23:

- the first light guide plate and the second light guide plate are two separate units or are integrated into one.

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2. Claims 1-3, 11-13 and 21-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Uchida et al. (US7019714B2).

Uchida et al. teach (Fig. 4) a display apparatus selectively operated in a first mode and a second mode comprising:

Claims 1, 11 and 21:

- an electronic device selectively operated in a first mode and a second mode;
- a processor for controlling said first light source and said second light source according to modes of said electronic device as Fig. 6 shown;
- a display panel having view side and back side, said viewer side having a first area and a second area 10/20; in response to an image signal, said first and second capable of displaying variable data;
- a first light source for illuminating said first area;
- a second light source for illuminating said second area; when said display apparatus is operated in said second mode for conserving power of said display apparatus

wherein

- said first area and said second area are illuminated with inherently substantially same brightness by said first light source and said second light source simultaneously to make said first area and said second area having substantially same visually brightness on the viewer side when said display apparatus is operated in said first mode;

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- the power consumption might further be reduced since only a required display region is irradiated (turn on while the other light source is turning off as Fig. 4 shown). This above feature inherently the following feature: said second light source is driven to a lower brightness level (turning off) to make said second area visually darker than said first area (turn on to irradiate),

Claims 2 and 12:

- said first light source and said second light source are both turned on when said display apparatus is operated in said first mode.

Claims 3 and 13:

- wherein said first light source is turned on (to irradiate) and said second light source is turned off (to conserve power) when said display apparatus is operated in said second mode.

Claim 22:

- said mobile device comprises a mobile phone, a personal digital assistance, or a digital camera.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. Claims 11-13 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugawara et al. (US 20030174262A1) as applied to claims 1-3, 6-9 and 21-22 and in view of Colorado (US7016701B2)

Sugawara et al. disclose all features in claims 11-13 and 16-19 (similar to claims 1-3 and 6-9) except a processor for controlling said first light source and said light source according to mode of said electronic device.

Colorado teaches a processor for controlling the first illumination region according to first light source and the second first illumination region according to second light source.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify a liquid crystal display device as Suzuki et al. disclosed with a processor for controlling said first light source and said light source according to mode of said electronic device for providing the selective activation and deactivation of at least one illumination region as taught by Colorado (in abstract).

4. Claims 11-13 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugawara et al. (US 20030174262A1) as applied to claims 1-3, 6-9 and 21-22 and in view of Uchida et al. (US7019714B2).

Suzuki et al disclose all features in claims 11-13 and 16-19 (similar to claims 1-3 and 6-9) except a processor for controlling said first light source and said light source according to mode of said electronic device.



Uchida et al. teaches a processor 305/306 for controlling the first illumination region 20 and the second first illumination region 10. Therefore, a processor can be used to control said first light source and said light source according to mode of said electronic device.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify a liquid crystal display device as Suzuki et al. disclosed with a processor for controlling said first light source and said light source according to mode of said electronic device for providing lower energy consumption as taught by Uchida et al. (col. 8 lines 25-32).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HOAN C. NGUYEN whose telephone number is (571) 272-2296. The examiner can normally be reached on MONDAY-THURSDAY:8:00AM-4:30PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HOAN C. NGUYEN  
Examiner  
Art Unit 2871

Chn

  
ANDREW SCHECHTER  
PRIMARY EXAMINER